its own plan and secret devices, in intestinal absorbing cell, in liver, in lymph gland; and each such guild or craft of cells knows its own cunning workmanship. . . . The classes of cells are greater artists and take wider interests than this; few of them resemble in narrowness of life and austerity of outlook the so-called human specialist'. And so on. All of which, again, is, like the terra ' biotic energy ', an admission that biochemistry cannot yet begin to suggest explanations of these processes.

Other Special Energies Postulated

One might dwell at some length on this question of the legitimacy of postulating special forms of energy as a way out of the difficulties of biological explanation. For Moore is not the only scientist of distinction who has resorted to it. About the beginning of the century William Ostwald, a leading German chemist, proposed to describe all the universe in terms of energies alone, and of course found himself driven to postulate a great variety of energies, including mental energy or energies. And more recently an engineer turned biologist, the late Eugenio Rignano, has proposed, like Moore, to solve the principal outstanding problems of biology by postulating a special form of energy peculiar to living things. And Rignano's proposal is in a sense more interesting than Moore's, because he makes larger claims for his peculiar energy, and thus brings out more clearly the illegitimate

nature of all such attempts.

Rignano, who wrote a number of books of considerable psychological merit and who was an ardent Lamarckian, occupies a peculiarly ambiguous position of compromise between the mechanists and the vitalists, a position which